

Patent Abstracts of Japan

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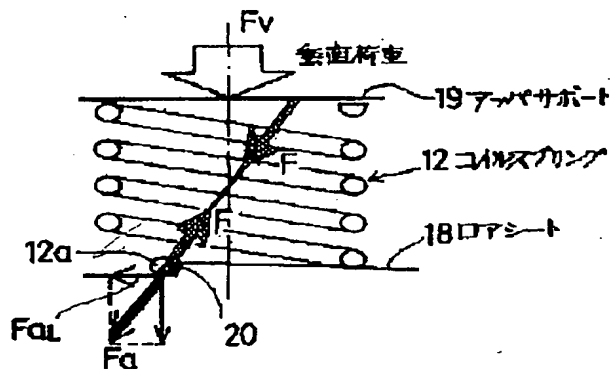
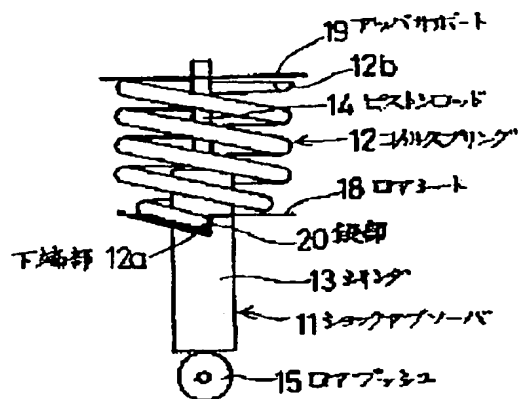
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TITLE : SUSPENSION FOR VEHICLE



**ABSTRACT :** **PURPOSE:** To reduce the slidable friction of a shock absorber by canceling the transverse force to be generated when the vertical load is applied to a coil spring by the transverse force to be applied to the shock absorber based on the particulars when a suspension is activated.

**CONSTITUTION:** The lateral force on a rod guide is obtained as the resultant of the components  $F_aL$  in the lateral direction to be generated by the vertical load  $F_v$ , and the lateral force by the body bending of a coil spring 12 and the synthesized lateral force to be generated based on the bending moments to be respectively generated at the upper and lower end parts of the shock absorber 11. The coil spring 12 and a lower seat 18 are turned around the outer circumference of a cylinder 13, and the direction of the component  $F_aL$  in the lateral direction is set at the position where the component  $E_aL$  in the lateral direction is canceled by the synthesized lateral force to reduce or eliminate the lateral force on the rod guide. Thus, the slidable friction to be generated on the shock absorber can be reduced.

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